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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,511	09/05/2000	Mitsuhiro Nomi	F-6636	7918
7590 01/29/2004		EXAMINER		
Jordan and Hamburg			JONES, SCOTT E	
122 East 42nd S New York, NY			ART UNIT PAPER NUMBER	
,			3713	zç
		DATE MAILED: 01/29/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>.</b>		$\gamma_{i}$				
	Application No.	Applicant(s)				
	09/655,511	NOMI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Scott E. Jones	3713				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period or - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from t, cause the application to become ABANDONE	nely filed  rs will be considered timely.  the mailing date of this communication.  CD (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on <u>07 N</u>	lovember 2003.					
2a)  This action is <b>FINAL</b> . 2b)  This	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
<ul> <li>4) ☐ Claim(s) 2-21 is/are pending in the application 4a) Of the above claim(s) is/are withdray</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 2-21 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or</li> </ul>	wn from consideration.					
Application Papers	, closion requirement.					
9)⊠ The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>05 September 2000</u> is/s	the state of the s	cted to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correc						
11)☐ The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. §§ 119 and 120						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domest since a specific reference was included in the firm 37 CFR 1.78.  a) The translation of the foreign language profits 14. Acknowledgment is made of a claim for domest reference was included in the first sentence of the Attachment(s)	is have been received. Is have been received in Application of the certified copies not received in Application priority under 35 U.S.C. § 119(a) st sentence of the specification of the certified copies not received in the specification of the specification application has been received in the specification of the specification of the specification application has been received in Application and the specification of the specification of the specification application has been received in Application and the specification of the specification of the specification and the specification of the specification and the specif	ion No ed in this National Stage ed. e) (to a provisional application) r in an Application Data Sheet. ceived. and/or 121 since a specific				
Attachment(s)  1) Motice of References Cited (PTO-892)	4) \ Interview Summary	(PTO-413) Paper No(s)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1	5) Notice of Informal F	Patent Application (PTO-152)				

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#### **DETAILED ACTION**

## Response to Amendment

1. This office action is in response to the request for continued examination and amendment filed on November 7, 2003 and October 14, 2003, respectively, in which applicant amends claims 15, 16, 20, and 21 and responds to the claim rejections. Claims 2-21 are pending.

#### Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 14, 2003 has been entered.

#### Drawings

- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:
  - On page 13, line 8, reference number (53G) is not in figure 12.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

# Specification

- 4. The disclosure is objected to because of the following informalities:
  - On page 12, at the end of line 12, applicant should delete the space between "of" and "f".

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• On page 23, line 10, "portions" is misspelled "prortions".

• Figure 10 is not discussed in the "Detailed Description of the Invention".

Correction is required.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 2, 15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Eisenbrey et al. (U.S. 5,516,105).

Eisenbrey et al. discloses an acceleration activated switching mechanism (game controller) held in a player's hand to provide inputs for a video game with the action in the game being based upon, for instance, a player's swinging or punching motions. Eisenbrey et al. additionally discloses:

Regarding Claims 2, 15, and 21:

• a signal generating device (20) retainable by a game player in a manner permitting transfer of at least one of a hitting motion and a swinging motion imparted thereto by said game player, the signal generating device including a signal generator including a sensor for sensing at least one of an acceleration and an impact of the signal generator generating a signal in response to said at least one of the hitting motion and the swinging motion when said at least one of said acceleration and said impact is sensed while said signal generating device is retained by the game player, said signal

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being indicative of a change in velocity of said signal generating device being moved by said game player, an entirety of said sensor of said signal generator being movable by the game player from a first location to a second location by movement of said signal generating device retained by the game player, said change in velocity being measured as a difference between a first velocity (initial velocity) of said sensor when at said first location and a second velocity (final velocity) of said sensor when at said second location (Abstract, Figure 1, Column 1, lines 8-15, Column 2, lines 5-40, Column 2, line 66-Column 3, line 3, Column 3, lines 33-54, Column 4, lines 38-47, Column 5, lines 1-3, 20-31, and 41-49, and Claim 1). Although the term "velocity" is not used in Eisenbrey et al., by definition, acceleration is simply the rate of change of the velocity. That is, A=Vf-Vi/Tf-Ti.;

- a display (12) having a display screen for displaying and successively renewing an instruction of motion on the display screen (Figure 1);
- evaluating means for evaluating a game result based on a generation timing of the signal (Abstract, Figure 1, Column 1, lines 8-15, Column 2, lines 5-40, Column 2, line 66-Column 3, line 3, Column 3, lines 33-54, Column 4, lines 38-47, Column 5, lines 1-3, 20-31, and 41-49, and Claim 1). One of the objects of Eisenbrey et al. is to realistically associate the movements of a game player with the actions being played out in a video game, therefore, the timing a player makes an input (signal) is critical to the evaluating of a game result. For instance, in a boxing game, if a player throws a punch after the player's opponent ducks, then the punch will not land, however, if

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the player throws a punch before the player's opponent ducks, then the punch will land and have some result, such as a knockdown; and

• a sound generator for outputting at least a background sound (Column 3, line 11).

#### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 3-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sagawa et al. (E.P. 0,903,169) in view of Eisenbrey et al. (U.S. 5,516,105).

Sagawa et al. discloses two operating sections with an operation input device comprising a keyboard input unit (13) and a turntable input unit (14) for playing a music action game and an effect producing device for producing a performance effect in response to a performance operation performed by the player(s) to each of the operation members. Sagawa et al. discloses a storage device for storing data of a musical composition and data of a performance procedure associated with the musical composition; a music play device for playing the musical composition based on the data stored in the storage device; and an operation instructing device for giving the player a visual instruction to operate the operation members in accordance with progress of a play of the musical composition based on the data stored in the storage device.

Sagawa et al. discloses an estimation device may estimate the performance operation based on a difference between timing of the performance procedure and timing at which the player actually performed the performance operation. Sagawa et al. discloses a sound effect producing device

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for producing the sound effects based on the operation input signals issued from the operation input device and the data of the sound effects stored in the storage device; and an estimation device for estimating operation of the player based on the operation input signals issued from the operation input device and the data of the performance procedure stored in the storage device. Sagawa et al. discloses producing at least one of the sound effects based on the operation input signals issued from the operation members and the data of the sound effects; estimating operations performed by the player based on the operation input signals issued from the operation members and the data defining the procedure. Sagawa et al. discloses an effect producing device may produce a reaction effect as one type of the performance effect each time the estimation device determines the estimation result, and the reaction effect my be changed in accordance with the estimation result. Sagawa et al. discloses a data storage device may store a plurality of data sets, each of which includes the data of the musical composition and the data of the performance procedure; and said game machine may further comprise a stage progress management device for controlling progress of a game in such a manner that when the estimation device gives a predetermined level of estimation with respect to the performance operation in one stage in which the musical playing device plays the musical composition based on one of the data sets; the game is allowed to progress to a next stage in which the music play device plays the musical composition and the instructing device instructs the performance operation based on another one of the data sets. Sagawa et al. discloses an indication of the indicator may change in such a manner that the length of each index mark represents a time period during which the player must hit a key repeatedly. Sagawa et al. discloses a storage device for storing data of a musical composition and data of a performance procedure associated with the musical

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composition. This storage device may include a storage device such as a hard disk drive or a (replaceable) floppy disk, an optical or a magneto-optical storage device such as a (replaceable) CD-ROM, a semiconductor storage device such as a RAM or a ROM, or the various types of storage devices. Sagawa et al. discloses a performance procedure presenting device for presenting the player with the performance procedure in a visual manner in association with a play of the musical composition based on the data of the performance procedure stored in the storage device. Sagawa et al. discloses a sound effect producing device for producing the sound effects based on the operation input signals issued from the operation input device and the data of the sound effects stored in the storage device. Sagawa et al. discloses a storage device for storing data of a musical composition, data of a performance procedure with respect to each of the operation members of the operation input device, and data of sound effects corresponding to each of the operation members. Sagawa et al. discloses a player operates at least one of the operation members in association with the music, the performance effect corresponding to the operation is mixed on the music. Since the data of the performance procedure is stored in advance and correct timing to operate each operation member is indicated to the player through the operation instructing device in a visual manner, the player only has to operate the operation members in accordance with the instruction given from the game machine. Sagawa et al. discloses two image display areas for displaying instructions to player(s) while moving the instructions with respect to a reference mark provided on the left and right sides of the screen and includes two signal generators provide on the left and right side of the game system. Sagawa et al. additionally discloses:

Regarding Claim 3:

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• the sound generator outputs the sounds based on the generation timing of the signal (Column 7, lines 16-24).

### Regarding Claim 4:

• the instruction of motion displayed on the display screen is in a form of at least one instruction mark (Column 1, lines 26-36, Column 2, lines 22-32, and Figures 7 and 10).

## Regarding Claim 5:

• the display includes an image data storage means for storing a display timing data of each instruction mark, and an image control means for reading a corresponding instruction mark to be displayed from the image data storage means and scroll displaying the read instruction mark on the display screen with respect to a reference mark (Column 1, lines 26-36, Column 2, lines 22-32, and Figures 7 and 10).

## Regarding Claim 6:

the sound generator includes a sound data storage means for storing a multitude of kinds of sound data, a sound control means for reading a corresponding sound data from the sound data storage means based on the signal from the signal generator which is inputted thereto, and a sound output means for outputting a sound based on the sound data read by the sound control means (Column 3, lines 29-42).

# Regarding Claim 7:

• the sound control means reads the corresponding sound data from the sound data storage means when the signal is inputted from the signal generator within a predetermined time period (Column 16, line 52-Column 17, line 1).

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Regarding Claim 8:

• a replaceable storage member readably storing a display timing data of each instruction mark stored in the image data storage means, a control program of the image control means, a multitude of kinds of sound data to be stored in the sound data storage means and a control program of the sound control means, wherein the data and the programs stored in the storage member are to be stored in the image data storage means and the sound data storage means (Column 1, lines 26-28, Column 9,

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Regarding Claims 9, 16, and 20:

lines 37-42, and Column 7, lines 10-19).

• the storage member also stores the background sounds, and the background sounds stored in the storage member are outputted from the sound output means (Column 7, lines 2-9, Figures 6 (52)(8a-c).

Regarding Claims 10, 16, and 20:

the evaluating means evaluates a game result based on a ratio of the number of signals inputted during a predetermined time period from the signal generator to a total number of the at least one instruction mark (Column 1, lines 41-45 and Column 4, lines 7-11).

Regarding Claims 11 and 20:

• the display displays a first and second instruction mark on the display screen as the instruction of motion (Column 1, lines 50-Column 2, line 3 and Figures 3 and 4).

Regarding Claim 12:

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 the sound control means reads the corresponding sound data from the sound data storage means based on a combination of On-Off states of the first and second signals from the signal generator (Column 3, lines 29-42).

Regarding Claims 13, 16, 17, 18, 19, and 20:

• two image display areas for displaying the first and second instruction marks while moving them with respect to the reference mark are provided on the right and left sides of the display screen with respect to the game player, and two signal generators are provided on the right and left sides of the game system with respect to the game player (Figure 1 (5)(14)(15a-e) and 9 (65a and b)).

Regarding Claim 14:

• the two image display areas are provided for a plurality of game players, and the two signal generators are provided for a plurality of game players (Figure 1 (5)(14)(15a-e) and 9 (65a and b)).

Although Sagawa et al. discloses a keyboard input unit (13) and a turntable input unit (14) for playing a music action game, Sagawa et al. seems to lack explicitly disclosing:

Regarding Claims 11, 16, and 20:

• a signal generating device retainable by a game player in a manner permitting transfer of at least one of a hitting motion and a swinging motion imparted thereto by said game player, the signal generating device including a signal generator including a sensor for sensing at least one of an acceleration and an impact of the signal generator generating a signal in response to said at least one of the hitting motion and the swinging motion when said at least one of said acceleration and said impact is sensed

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while said signal generating device is retained by the game player, said signal being indicative of a change in velocity of said signal generating device being moved by said game player, an entirety of said sensor of said signal generator being movable by the game player from a first location to a second location by movement of said signal generating device retained by the game player, said change in velocity being measured as a difference between a first velocity of said sensor when at said first location and a second velocity of said sensor when at said second location.

However, Eisenbrey et al. teaches of an acceleration activated switching mechanism (game controller) held in a player's hand to provide inputs for a video game with the action being played in the game being based upon, for instance, a player's swinging or punching motions. Eisenbrey et al. and Sagawa et al. are analogous art because each relate to obtaining player inputs via hand motions to generate an outcome in a video game. Furthermore, Eisenbrey et al. teaches:

Regarding Claims 11, 16, and 20:

transfer of at least one of a hitting motion and a swinging motion imparted thereto by said game player, the signal generating device including a signal generator including a sensor for sensing at least one of an acceleration and an impact of the signal generator generating a signal in response to said at least one of the hitting motion and the swinging motion when said at least one of said acceleration and said impact is sensed while said signal generating device is retained by the game player, said signal being indicative of a change in velocity of said signal generating device being moved

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by said game player, an entirety of said sensor of said signal generator being movable by the game player from a first location to a second location by movement of said signal generating device retained by the game player, said change in velocity being measured as a difference between a first velocity (initial velocity) of said sensor when at said first location and a second velocity (final velocity) of said sensor when at said second location (Abstract, Figure 1, Column 1, lines 8-15, Column 2, lines 5-40, Column 2, line 66-Column 3, line 3, Column 3, lines 33-54, Column 4, lines 38-47, Column 5, lines 1-3, 20-31, and 41-49, and Claim 1). Although the term "velocity" is not used in Eisenbrey et al., by definition, acceleration is simply the rate of change of the velocity. That is, A=Vf-Vi/Tf-Ti.

It would have been obvious to one having ordinary skill in the art, at the time of the applicant's invention, to replace the turntable scratch pad and musical keyboard input keys of Sagawa et al. with the acceleration activated switching mechanism (game controller) held in a player's hand to provide inputs for a boxing type video game of Eisenbrey et al. On would be motivated to do so to make it easier for a game player to respond rapidly and accurately to an action shown on the display device.

## Response to Arguments

9. Applicant's arguments with respect to claims 2-21 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Powell '290 and Woolston '123 disclose input devices having acceleration/velocity
 sensors held in the user's hand to output signals to a video game machine based upon
 a player's actions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott E. Jones whose telephone number is (703) 308-7133. The examiner can normally be reached on Monday - Thursday, 6:30 A.M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on (703) 308-1327. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Scott E. Jones Examiner Art Unit 3713

Scott E. Jones

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